Deborah Shinkle

FromFrom: **Gordon, Sydney** <GordonSJ@nv.doe.gov>
Date: Thu, May 13, 2010 at 5:01 PM
Subject: RE: Isotopic inventory for JASPER TRU waste
To: Michael Skougard <michael.skougard@gmail.com>, "Carter, Charlotte V (NEV)" <carterc@nv.doe.gov>, "Disanza, E Frank (NEV)" <disanza@nv.doe.gov>, "Carilli, Jhon T (NEV)" <carilli@nv.doe.gov>
Cc: "Cohn, Linda M (NEV)" <cohnl@nv.doe.gov>, "carrie.stewart" <Carrie.Stewart@nv.doe.gov>, Mike West <mikew@phe.com>, "Enyeart, Sandra B." <SANDRA.B.ENYEART@saic.com>, "Gorden, Milton E." <MILTON.E.GORDEN@saic.com>

Mike:
Let me know if the attached information takes care of your immediate need.
Syd

Sydney J. Gordon
Waste Generator Coordinator
National Security Technologies, LLC
gordonsj@nv.doe.gov
(W) 702-295-0966
(C) 702-595-2847

From: Michael Skougard [mailto:michael.skougard@gmail.com]
Sent: Thursday, May 13, 2010 9:12 AM
To: Carter, Charlotte V (NEV); Disanza, E Frank (NEV); Carilli, Jhon T (NEV); Gordon, Sydney
Cc: Cohn, Linda M (NEV); carrie.stewart; Mike West; Enyeart, Sandra B.; Gorden, Milton E.
Subject: Fwd: Isotopic inventory for JASPER TRU waste

Please see the following email for the subject data request. I've "shot-gunned" this email because I'm not sure if the information is available through Waste Management or if we need to get it from the program side. So, for any responses to this request, please cc all of the "to's" and cc's on this email.

This information is needed fairly quickly. Please provide the requested information by COB Tuesday (May 19, 2010), if possible.

Thank you for your help on this.

Mike Skougard

---------- Forwarded message ----------
From: **Gorden, Milton E.** <MILTON.E.GORDEN@saic.com>
Date: Thu, May 13, 2010 at 8:31 AM
Subject: Isotopic inventory for JASPER TRU waste
To: Michael Skougard <michael.skougard@gmail.com>

Mike,

In order to analyze the transportation accident impacts for shipping JASPER TRU waste to INL, we need to know the isotopic composition of the waste (isotope name and number of curies for each). If the composition can be described in terms of plutonium equivalents, that could work too.

I realize this TRU waste has not been formally characterized by WIPP, but there should be some idea of the isotopic content. Realizing that the isotopic content of each TRU waste package will be different, we could use either maximum values, or typical or average values, depending on what is readily available.

If you could forward this to the appropriate people, that would be great.

Thanks!

Milton

NT-JAS-01

			Deleted? No	By User	Date/Time
Status:	WIPP-bound	16	Last Updated	192654	4/24/2007 3:17:47 PM
Waste Stream ID:	NT-JAS-01	16	Created	192654	4/24/2007 3:17:31 PM
Local ID:	Jasper	16	Deleted/Undeleted	192654	4/24/2007 3:17:47 PM
Inventory Date:	12/31/2006	16			

Site:	Nevada Test Site	16
Waste Stream Name:	Combined metal scrap and incidental combustibles	16
Waste Stream Description:	Waste stream consists of spent Primary Target Chambers from Jasper gas gun experiments. PTCs are metal chambers used to contain debris from the impact of a sabot on a disk of plutonium metal.	16
Source Category:	R&D/R&D Laboratory Waste	16
Source Description:	The source of the waste is the JASPER gas gun at the NTS. This facility is part of the stockpile stewardship program and will perform equation of state studies on plutonium.	16
TRU Waste Determination:	TRU	16
Defense Determination:	Defense-Related	16
Waste Matrix Code:	S5400	16
Final Waste Form:	Heterogeneous	16
Acceptance Comments:	<N/A>	<N/A>
Classified Present?	N	16
Latest Vent Date:	9/1/2006	16

Radiological

Radionuclide Measurement CY:	2003	16
Radionuclide Confidence Level:	Medium	16
Pct Existing Vol Less than 100 nCi/g:	0.00%	16
Radionuclide Comments:	<N/A>	<N/A>
Radionuclide Measmt Methods:	<N/A>	<N/A>

Radionuclide Concentrations: 16

Symbol	Ci/m3
Am-241	1.35E-01
Pu-238	7.02E-02
Pu-239	9.92E-02
Pu-240	8.02E-02
Pu-241	2.45E+00
Total:	**2.83E+00**

Physical Form

Waste Material Parameter Densities: 16

Parameter	kg/m3
Iron-based Metals/Alloys	2.00E+01
Aluminum-based Metals/Alloys	3.00E+00
Other Metals	1.00E+00
Other Inorganic Materials	1.00E+00
Cellulosics	1.00E+00
Rubber	1.00E+00
Plastics	1.00E+00
Total:	**2.80E+01**

Hazardous

Hazardous Waste Numbers: <N/A> <N/A>

Hazardous Material Comments:	<N/A>	<N/A>

Constituents

PCBs Present?	N	16
PCB Concentration:	<N/A>	
Pyrochemical Salts Present?	N	16
Pyrochemical Salts Source:	<N/A>	<N/A>
Pyrochemical Salts Weight %:	0.00%	
VOCs Present?	U	1
VOC Comments:	<N/A>	<N/A>
Oxyanions:	<N/A>	<N/A>
Complexing Agents:	<N/A>	<N/A>
Other Chemical Constituents:	<N/A>	<N/A>

History

Management Comments:	<N/A>	<N/A>
Pct Waste Vol Gen. Before 1970:	0.00%	16
Historical Packaging Comments:	<N/A>	<N/A>
Related TWBIR Rev. 2 WS ID's:	<N/A>	<N/A>

Transportation History: 16

Site	Comments
NTS	<N/A>

Current Form

Current Form Dose Rate (mrem/hr):	199	16
Current Form Handling:	CH	
Pct Vol. Above Ground:	100.00%	16
Accessibility Level:	Easy	16
Accessibility Comments:	<N/A>	<N/A>
Storage Facility Info:	<N/A>	<N/A>
Treatment Used / Required?	N	16
Cements Used for Solidification:	None	16
Treatment Options:	<N/A>	<N/A>
Current Form Container Types:	**SWB Dir Ld w/ Liner**	16

Category	Box
WIPP Approved	Yes
Overpack	No
Internal Volume (m3)	1.89
Payload Volume (m3)	1.89
Steel Density (kg/m3)	153.5
Plastic Density (kg/m3)	1.2
Lead Density (kg/m3)	0
Cellulosics Density (kg/m3)	0

Stored Count:	11	16
Projected Count:	192	16
Final Year of Projected Generation:	2022	16

NOTE: Actual numerical values have been rounded for presentation purposes

Projected Generation Schedule:	Year	Count	Comments	16
	2007	12	<N/A>	
	2008	12	<N/A>	
	2009	12	<N/A>	
	2010	12	<N/A>	
	2011	12	<N/A>	
	2012	12	<N/A>	
	2013	12	<N/A>	
	2014	12	<N/A>	
	2015	12	<N/A>	
	2016	12	<N/A>	
	2017	12	<N/A>	
	2018	12	<N/A>	
	2019	12	<N/A>	
	2020	12	<N/A>	
	2021	12	<N/A>	
	2022	12	<N/A>	
	Total:	**192**		

Comments:	<N/A>	<N/A>
Repack Required?:	N	16
Percent of Container Type Needing Repack:	0.00%	16
Repack Cause(s):	<N/A>	<N/A>
Average Mass Per Container (kg):	<N/A>	<N/A>
Percent of Stored Containers Readily Shippable:	100.00%	16

Final Form

Final Form Dose Rate (mrem/hr):	199	16
Final Form Handling:	CH	
Pct Vol. From 100 to 1000 rem/hr:	0.00%	16
TRUCON Codes:	<N/A>	<N/A>
Final Form Container Types:	**SWB Dir Ld w/ Liner**	16

Category	Box
WIPP Approved	Yes
Overpack	No
Internal Volume (m3)	1.89
Payload Volume (m3)	1.89
Steel Density (kg/m3)	153.5
Plastic Density (kg/m3)	1.2
Lead Density (kg/m3)	0
Cellulosics Density (kg/m3)	0

Stored Count:	11	16
Projected Count:	192	16
Final Year of Projected Generation:	2022	16

Projected Generation Schedule:	Year	Count	Comments	16
	2007	12	<N/A>	
	2008	12	<N/A>	

2009	12	<N/A>
2010	12	<N/A>
2011	12	<N/A>
2012	12	<N/A>
2013	12	<N/A>
2014	12	<N/A>
2015	12	<N/A>
2016	12	<N/A>
2017	12	<N/A>
2018	12	<N/A>
2019	12	<N/A>
2020	12	<N/A>
2021	12	<N/A>
2022	12	<N/A>
Total:	**192**	

Comments:	<N/A>	<N/A>
Average Mass Per Container (kg):	<N/A>	<N/A>
Fill Factor:	100.00%	16

Shipped Containers

AK Reports:	<N/A>	<N/A>
Shipped Container Types:	<N/A>	<N/A>

References Used:

ID	Record Number	Title	Rev	Date
1	N/A	CID Default Value		
16	NT06U-00	Import Template from NTS		4/24/2007

NOTE: Actual numerical values have been rounded for presentation purposes